Preliminary Classification:

Proposed Class: 210

Subclass:

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450

### **NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of

Inventor(s):

Thomas A. Davis

For (title):

PRODUCTION OF PURIFIED WATER AND HIGH VALUE CHEMICALS FROM

SALT WATER

### 1. Type of Application

This application is for an original (non-provisional).

# **EXPRESS MAILING UNDER 37 C.F.R. § 1.10\***

(Express Mail label number is mandatory.) (Express Mail certification is optional)

I hereby certify that this paper, along with any document referred to, is being deposited with the United States Postal Service on this date August 1, 2003 in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 as "Express Mail Post Office to Addressee" Mailing Label No. ER464942688US.

Debra Dunn-Brown

Type or print name of person mailing paper

Date: August 1, 2003

Signature of person certifying

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

\*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing 37 C.F.R. 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

## 2. Papers Enclosed

- A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application
  - 35 Page(s) of Specification
  - 15 Page(s) of Claims
  - 8 Sheet(s) of Drawing(s)--Informal

## B. Other Papers Enclosed

- 1 Page(s) of Abstract
- 1 Page(s) of Title Page
- 1 Page(s) of Express Mail Certificate
- 3 Page(s) of Patent Application Data Sheet
- 3 Page(s) of Combined Declaration and Power of Attorney (unexecuted)
- 1 Page(s) of Check No. 23232 for \$861.00
- 1 Page(s) of Return Postcard

## 3. Declaration or Oath

An unexecuted declaration is enclosed.

## 4. Inventorship Statement

The inventorship for all the claims in this application is the same.

#### 5. Language

English

# 6. Fee Calculation (37 C.F.R. § 1.16)

Regular Application

	<del>-</del>		C	LAIMS	S AS FII	ED					
	Number F	Number Extra			Rate			Basic Fee 37 C.F.R. § 1.16(a) \$750.00			
Total Claims (37 C.F.R § 1.16(c))	60	_	20	=	40	x	\$	18.00	=	\$	720.00
Independent Claims (37 C.F.R § 1.16(b))	6	_	3	=	3	x	\$	84.00	=	\$	252.00
Multiple Dependentif any (37 C.F.R							\$	280.00		\$	0.00

## Filing Fee Calculation

### 7. Assertion of Small Entity Status

Applicant hereby asserts status as a small entity under 37 C.F.R. § 1.27. Status as a small entity was asserted in the prior application 60/400,598 filed on August 2, 2002 from which benefit is being claimed for this application under 35 U.S.C. § 119(e) and which status as a small entity is still proper and asserted for this application.

Filing Fee Calculation (50% of above Filing Fee Calculation)

<u>\$861.00</u>

## 8. Fee Payment Being Made at This Time

**Enclosed** 

لحمد والمراج

Filing Fee

\$861.00

**Total Fees Enclosed** 

\$861.00

### 9. Method of Payment of Fees

Attached is Check No. 23232 in the amount of \$861.00.

Charge any additional fees required by this paper or credit any overpayment to Account No. 50-2548.

A duplicate of this paper is attached.

## 9. Authorization to Charge Additional Fees

The Office is hereby authorized to charge, to Account No. 50-2548, any additional fees that may be required by this paper and during the entire pendency of this application.

#### 10. Instructions as to Overpayment

Credit Account No. 50-2548.

Date: August 1, 2003

Reg. No.: 35,124

Tel. No.: 864-250-2238

Signature of Practitioner

Charles E. Dunlap

Nelson Mullins Riley & Scarborough, LLP

Post Office Box 11070 Columbia, SC 29211

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Thomas A. Davis

Application No.: Not yet assigned

Group No.:

Filed: August 1, 2003

Examiner:

For:

PRODUCTION OF PURIFIED WATER AND HIGH VALUE CHEMICALS FROM SALT

WATER

**Mail Stop Patent Application Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

#### **EXPRESS MAIL CERTIFICATE**

"Express Mail" label number <u>ER464942688US</u> Date of Deposit August 1, 2003

I hereby state that the following attached papers or fees:

- 1. Fee Transmittal Sheet (1 page)
- 2. New Application Transmittal with Duplicate (3 pages each)
- 3. Patent Application Data Sheet (3 pages)
- 4. Unexecuted Combined Declaration and Power of Attorney (3 pages)
- 5. Non-Provisional Application with Title Page, Abstract (52 pages)
- 6. Drawings (Informal) (8 pages)
- 7. Check No. 23232 for \$861.00 (1 page)
- 8. Return Postcard (1 page)

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313-1450.

Debra Dunn-Brown

Signature of person mailing paper or fee

PTO/SB/17 (01-03)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 861.00

Complete if Known				
Application Number	Not yet assigned			
Filing Date	August 1, 2003			
First Named Inventor	Thomas A. Davis			
Examiner Name	Not yet assigned			
Art Unit	Not yet assigned			
Attorney Docket No.	16139/09038			

Peposit Account	METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Deposit Account:   So-2548							
Deposit Account Number   Deposit Account   Deposit Account Number   Deposit Account   Deposit Account Number   Deposit	1 —						
Surbarge - late filing fee or oath   Number	Denosit		d				
Nelson Mullins et al   1052   50   2052   25   25   25   25   25							
Charge fee(s) indicated below	Deposit Account Nelson Mullins et al		コ				
Charge fee(s) indicated below   Credit any overpayments   1812 2,520		, , ,	$\dashv$				
Charge any additional fee(s) during the pendency of this application   1804   920*   1804   920*   1804   920*   1804   1805   1804   1805		1812 2,520 1812 2,520 For filing a request for ex parte reexamination	$\dashv$				
Tell continued   Tell			$\exists$				
1. BASIC FILING FEE   Large Entity   Small Entity   Fee							
1. BASIC FILING FEE   Large Entity   Small Entity   Fee							
Large Entity   Small Entity   Fee Fee   Fee			4				
Fee		1253 930 2253 465 Extension for reply within third month	_				
1001 750   2001 375	Fee Fee Fee Fee Fee Description Fee Paid	1254 1,450 2254 725 Extension for reply within fourth month					
1002 330   2002 165   Design filing fee   1401 320   2401 160   Notice of Appeal   1402 320   2402 160   Filing a brief in support of an appeal   1402 320   2402 160   Filing a brief in support of an appeal   1403 280   2403 140   Request for oral hearing   1451 1,510   Petition to institute a public use proceeding   1451 1,510   1451 1,510   Petition to revive - unavoidable   1453 1,300   2452   55   Petition to revive - unavoidable   1453 1,300   2453   650   Petition to revive - unintentional   1451 1,510   1451 1,510   1451   1,510   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1451 1,510   1451 1,510   1451 1,510   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   55   Petition to revive - unintentional   1453 1,300   2452   255   Petition to revive - unintentional   1453 1,300   2452   255   Petition to revive - unintentional   1453 1,300   2452   255   Petition to revive - unintentional   1453 1,300   2452   255   Petition to revive - unintentional   1453 1,300   2452   255   Petition to revive - unintentional   1453 1,300   2501   450   Utility issue fee (or reissue)   1453 1,300   2501   450   Utility issue fee (or reissue)   14501   14501   14501   14501   14501   14501   14501   14501   14501   14501   14501	4004 750 0004 075 11615 610 600	1255 1,970 2255 985 Extension for reply within fifth month	_				
1402   320   2402   160   Filing a brief in support of an appeal   1402   320   2402   160   Filing a brief in support of an appeal   1403   280   2403   140   Request for oral hearing   1405   150   1451   1,510   Petition to institute a public use proceeding   1451   1,510   1451   1,510   Petition to revive - unavoidable   1453   1,300   2453   650   Petition to revive - unintentional   1451   1,510   1,500   1452   110   2452   55   Petition to revive - unintentional   1,500	13/5	1401 320 2401 160 Notice of Appeal	_				
1004 750   2004 375   Reissue filing fee   1403 280   2403 140   Request for oral hearing   1451 1,510   Petition to institute a public use proceeding   1451 1,510   1451 1,510   Petition to revive - unavoidable   1453 1,300   2453   650   Petition to revive - unintentional   1451 1,510   1451 1,510   Petition to revive - unavoidable   1453 1,300   2453   650   Petition to revive - unintentional   1501 1,300   2501   650   Utility issue fee (or reissue)   1502 470   2502 235   Design issue fee   1503 630   2503 315   Plant issue fee   1503 630   2503 315   Plant issue fee   1460 130   1460 130   Petitions to the Commissioner   1807 50   1807 50   Processing fee under 37 CFR 1.17(q)   1806 180   Submission of Information Disclosure Stmt   1809 750   2809 375   Filing a submission after final rejection (37 CFR 1.129(a))   1203 280   2203 140   Multiple dependent claims in excess of 20   1204 84   2204 42 "Reissue independent claims over original patent   1801 750   2801 375   Request for oral hearing   1451 1,510   Petition to institute a public use proceeding   1453 1,510   1451 1,510   Petition to revive - unavoidable   1453 1,300   2453 650   Petition to revive - unavoidable   1453 1,300   2453 650   Petition to revive - unavoidable   1453 1,300   2453 650   Petition to revive - unavoidable   1501 1,300   2501 650   Utility issue fee (or reissue)   1502 470   2502 235   Design issue fee   1503 630   2503 315   Plant issue fee   1408 130   Petitions to the Commissioner   1800 130   Processing fee under 37 CFR 1.17(q)   1806 180   Submission of Information Disclosure Stmt   1800 1800   1800	l l l l l l l l l l l l l l l l l l l	1402 320 2402 160 Filing a brief in support of an appeal					
1005 160   2005 80   Provisional filing fee   SUBTOTAL (1)   (\$) 375.00   1451 1,510   2452 55   Petition to revive - unavoidable   1453 1,300   2453 650   Petition to revive - unintentional   1451 1,510   1451 1,510   2452 55   Petition to revive - unintentional   1453 1,300   2453 650   Petition to revive - unintentional   1501 1,300   2501 650   Utility issue fee (or reissue)   1502 470   2502 235   Design issue fee   1503 630   2503 315   Plant issue fee   1503 630   2503 315		1403 280 2403 140 Request for oral hearing	_				
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from below Fee Paid 1501 1,300 2501 650 Utility issue fee (or reissue)    Extra Claims   60   -20** =   40   X   9   =   360     Independent   6   -3** =   3   X   42   =   126     Multiple Dependent   1807   50   Processing fee under 37 CFR 1.17(q)     Large Entity   Small Entity   Fee Fee   Fee Fee Code (\$)   Code (\$)     1202   18   2202   9   Claims in excess of 20     1203   280   2203   140   Multiple dependent claims in excess of 3     1204   84   2204   42   ** Reissue independent claims in excess of 20     1205   18   2205   9   ** Reissue claims in excess of 20     1205   18   2205   9   ** Reissue claims in excess of 20     1205   18   2205   9   ** Reissue claims in excess of 20     1205   18   2205   9   ** Reissue claims in excess of 20     1205   18   2205   9   ** Reissue claims in excess of 20     1206   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1206   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1207   18   2205   9   ** Reissue claims in excess of 20     1208   1807   1807   1808   1808   1808   1808   1808   1808   1808   1808   1808   1808   1808   1808   1808   1808   1808   1808   18		1451 1,510 1451 1,510 Petition to institute a public use proceeding	_				
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE  Extra Claims below Fee Paid   1501 1,300   2501   650 Utility issue fee (or reissue)   1502 470   2502 235 Design issue fee   1503 630   2503 315 Plant issue fee   1503 630   25	SUBTOTAL (1) (\$) 375.00	1452 110 2452 55 Petition to revive - unavoidable	4				
Substitute   Sub		1453 1,300 2453 650 Petition to revive - unintentional	4				
Total Claims 60 -20** = 40 X 9 = 360   1503 630   2503 315 Plant issue fee   1460 130   1460 130   Petitions to the Commissioner   1807 50   1807 50   Processing fee under 37 CFR 1.17(q)   1806 180   Submission of Information Disclosure Stmt   1806 180   Submission of Information Disclosure Stmt   1808 180   1808 180   1808 180   1809 750	Fee from	1501 1,300 2501 650 Utility issue fee (or reissue)	_				
Independent Claims Multiple Dependent  Large Entity   Small Entity Fee Fee Code (\$)  1202 18 2202 9 Claims in excess of 20 1203 280 2203 140 Multiple dependent claims in excess of 3 1204 84 2204 42 ** Reissue independent claims over original patent  1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent  SUBTOTAL (2)  (\$) 486.00  1503 630 1503 315 Plant issue fee 1460 130 Petitions to the Commissioner 1807 50 Processing fee under 37 CFR 1.17(q)  1806 180 Submission of Information Disclosure Stmt 8021 40 8021 40 Recording each patent assignment per property (times number of properties) 1809 750 2809 375 Filing a submission after final rejection (37 CFR 1.129(a)) 1810 750 2810 375 For each additional invention to be examined (37 CFR 1.129(b)) 1801 750 2801 375 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application  Other fee (specify)		1502 470 2502 235 Design issue fee	4				
Claims Multiple Dependent  Large Entity   Small Entity Fee Fee Code (\$)  1202 18 2202 9 Claims in excess of 20 1203 280 2203 140 Multiple dependent claims in excess of 3 1204 84 2204 42 ** Reissue independent claims over original patent  1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent  1460 130 1460 130 Petitions to the Commissioner 1807 50 Processing fee under 37 CFR 1.17(q) 1806 180 Submission of Information Disclosure Stmt 1806 180 Submission of Information Disclosure Stmt 18021 40 8021 40 Recording each patent assignment per property (times number of properties) 1809 750 2809 375 Filing a submission after final rejection (37 CFR 1.129(a)) 1810 750 2810 375 For each additional invention to be examined (37 CFR 1.129(b)) 1801 750 2801 375 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application  Other fee (specify)		1 111 1	4				
Large Entity   Small Entity   Fee   Fee   Fee   Fee   Fee   Code (\$)   Code (	Claims	<b>1</b> 1111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4				
Fee Code (\$)  1202 18  1202 9 Claims in excess of 20  1203 280  1204 84  1204 84  1204 84  1205 9 ** Reissue claims in excess of 20  1205 18  1205 9 ** Reissue claims in excess of 20  1206 18  1207 18  1208 18  1209 9 Claims in excess of 3  1200 9 Claims in excess of 3  1200 1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1800 375 For each additional invention to be examined (37 CFR 1.129(b))  1801 750  1801 750  1802 900 Request for Continued Examination of a design application  Other fee (specify)  Other fee (specify)			$\dashv$				
Code (\$)  1202 18  1202 9 Claims in excess of 20  1201 84  1202 18  1202 19 Claims in excess of 20  1203 280  1203 280  1204 84  1204 84  1204 84  1205 18  1205 9 ** Reissue claims in excess of 20 and over original patent  1205 18  1206 (\$)  1207 Code (\$)  1208 9 Claims in excess of 20  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 750  1809 375 For each additional invention to be examined (37 CFR 1.129(b))  1801 750  1801 750  1802 900  1802 900 Request for expedited examination of a design application  Other fee (specify)			$\dashv$				
1202   18   2202   9   Claims in excess of 20   1809   750   2809   375 Filing a submission after final rejection (37 CFR 1.129(a))   1809   750   2809   375 Filing a submission after final rejection (37 CFR 1.129(a))   1809   750   2809   375 For each additional invention to be examined (37 CFR 1.129(b))   1801   750   2801   375 For each additional invention to be examined (37 CFR 1.129(b))   1801   750   2801   375 Request for Continued Examination (RCE)   1801   750   1802   900   900	Code (\$) Code (\$)	8021 40 8021 40 Recording each patent assignment per property (times number of properties)					
1203 280 2203 140 Multiple dependent claim, if not paid 1204 84 2204 42 ** Reissue independent claims over original patent 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent 1205 18 2205 9 (\$) 486.00 2810 375 For each additional invention to be examined (37 CFR 1.129(b)) 1801 750 2801 375 Request for Continued Examination (RCE) 1802 900 Request for expedited examination of a design application 1802 900 Other fee (specify)	1202 10 2202	1809 750 2809 375 Filing a submission after final rejection	٦				
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over original patent  1801 750 2801 375 Request for Continued Examination (RCE)  1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent  1802 900 1802 900 Request for expedited examination of a design application  Other fee (specify)			_				
and over original patent of a design application  SUBTOTAL (2) (\$) 486.00  Other fee (specify)		1801 750 2801 375 Request for Continued Examination (RCE)	-				
SUBTOTAL (2) 1(%) 400.00							
3000000 (A)	SUBTOTAL (2) (\$\ 486.00	Other fee (specify)					
*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0.00		*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 0.00					
SUBMITTED BY (Complete (if applicable)		(Complete (if applicable)					

SUBMITTED BY			(Complete	(if applicable)	
Name (Print/Type)	Charles E. Dunlap	Registration No. (Attorney/Agent) 35,124	Telephone	Telephone 864-250-2238	
Signature	COLA LINE		Date	August 1, 2003	

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.